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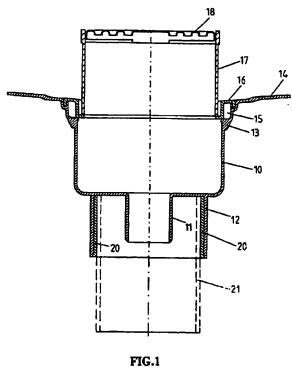
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### (54) Abstract Title A drain fitting

(57) The present invention provides a drain fitting of the type comprising a one-piece machined part comprising a pot (10), a collar (14) and a connecting branch (12) serving as a connection to a pipeline (21) and consisting of a plastics material, preferably polypropylene, which is resistant to water, heat, frost and chemicals. The connecting branch (12) is lined with, and/or, tightly connected to, a sleeve (20) which is made of a bonding plastics material, preferably, PVC. This enables the connecting branch (12) to be connected simply and durable to the pipeline (21) which is likewise made of a bonding plastics material.



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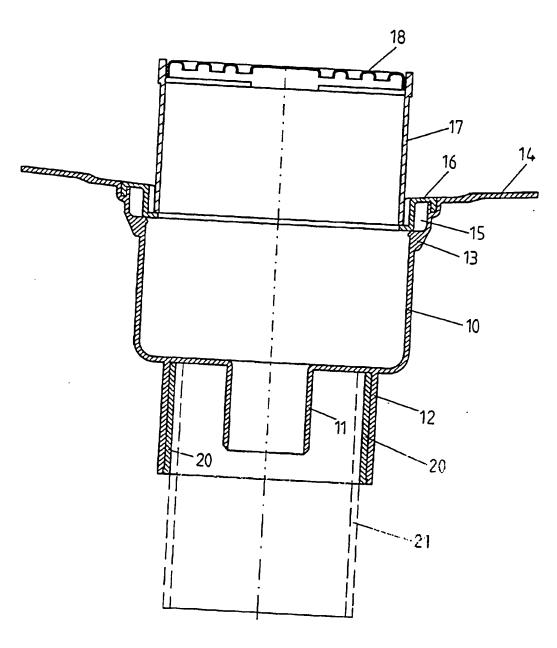


FIG.1

# A DRAIN FITTING

The present invention relates to a drain fitting, particularly a floor drain fitting.

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Floor drain fittings which are made from a one-piece machined part comprising a pot with a connecting branch on the underside and a collar made from a plastics material, for example, polypropylene, which is resistant to water, heat, frost and chemicals, are known. Such drain fittings are connected to a pipeline by means of socket fittings.

The object of the invention resides in devising a drain fitting, for example, a floor drain fitting, of the previously mentioned type which can be durably connected to a pipeline in a more simple manner.

According to the present invention there is provided a drain fitting comprising a one-piece machined part which is 20 made from a plastics material which is resistant to water, frost, heat and chemicals, the one-piece machined part comprising a pot, a collar and a connecting branch on the bottom of the pot wherein the connecting branch on the bottom is lined with, and/or, tightly connected to, a sleeve which is made of a bonding plastics material.

The sub-claims contain preferred embodiments of this solution.

With the floor drain fitting of the present invention, connection between the pipeline and the pot of the drain fitting can be effected without the use of a coupling bush. That is, such connection can be effected by simply inserting the pipeline into the drain fitting, since the pipeline consists of a bonding plastics material which has the capacity to be stuck firmly and durably to the 10 likewise adherable sleeve provided in the drain fitting. The sleeve which is made of bonding plastics material and the pipe branch which is made of durable plastics material must be firmly connected to one another, which according to 15 a further aspect of the present invention is produced preferably by spraying or applying or injection moulding the one-piece machined part which is made of durable plastics material onto the sleeve.

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- A, non-limiting, embodiment of the present invention will now be described with reference to figure 1, which illustrates a longitudinal section through a floor drain fitting in accordance with the present invention.
- 25 As illustrated, a floor drain fitting in accordance with the present invention comprises a pot 10, an inner

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pipe branch 11 on the bottom side thereof, an outer pipe branch 12, an edge profile 13 and a collar 14 all formed from a one-piece machined part which is made from a plastics material which is resistant to water, heat, frost and chemicals, preferably, polypropylene. In a generally known fashion, a supporting ring 16, which displays a cap part 17 with a grating 18, is inserted in the region of the edge profile 13.

- The outer pipe branch 12 which is connected to a pipeline 21 (shown is dotted lines), is lined with, and/or, firmly attached to, a sleeve 20 which is made from a bonding plastics material, preferably, PVC (polyvinylchloride). The pipeline 21 likewise consists of a bonding plastics material. On insertion of the pipeline 21 into the outer pipe branch 12 of the drain fitting, same is stuck to the sleeve 20 thereby effecting a durable connection in a more simple manner.
- In a preferred embodiment the production of a drain fitting in accordance with the present invention is achieved preferably such that the one-piece machined part 10, 11, 12, 13 which is made of durable plastics material can be injection moulded onto or sprayed onto or applied onto the sleeve 20, resulting in the firm connection of

such one-piece machined part 10, 11, 12, 13 to the sleeve 20 solely by shrinkage.

It is to be understood that although the present invention has been described by way of example to a floor drain fitting same can also be used as a roof drain, a cellar drain, as well as for similar components.

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#### CLAIMS

- A drain fitting comprising a one-piece machined
   part which is made from a plastics material which is resistant to water, frost, heat and chemicals, the one-piece machined part comprising a pot, a collar and a connecting branch on the bottom of the pot wherein the connecting branch on the bottom is lined with, and/or, tightly
   connected to, a sleeve which is made of a bonding plastics material.
- A drain fitting as claimed in claim 1, wherein the one-piece machined part is sprayed or applied or injection moulded onto the sleeve.
  - 3. A drain fitting as claimed in claim 1 or 2, wherein, the one-piece machined part is made from polypropylene.

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- 4. A drain fitting as claimed in any one of the preceding claims, wherein the sleeve is made of PVC-plastics material.
- 25 5. A drain fitting substantially as hereinbefore described with reference to the accompanying drawings.





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Claims searched: 1-5

Examiner:

Dr. Robert Fender

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14 January 1999

# Patents Act 1977 Search Report under Section 17

#### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.Q): E1C: C18

Int Cl (Ed.6): E04D 13/04

Other: Online: WPI, EPODOC, PAJ

#### Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
Y	EP 0145012 A2	(ETERNIT) see figure 1	1
Y	US 5724777	(HUBBARD) see expandable tape 21 on figure 1 & column 3 lines 28-37	1
A	US 5141633	(ROOF ACCESSORIES) see elastomeric sleeve 46 on figures 1, 3 & 4	-
A	US 4505499	(UGLOW & UGLOW) see compressible rubber tubular member 40 on figures 1 & 2	-

X Document indicating lack of novelty or inventive step
 Y Document indicating lack of inventive step if combined with one or more other documents of same category.

<sup>&</sup>amp; Member of the same patent family

Document indicating technological background and/or state of the art.
 Document published on or after the declared priority date but before the filing date of this invention.

E Patent document published on or after, but with priority date earlier than, the filing date of this application.